
Sustainable Procurement Behavior: A Case of Government Departments

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ABSTRACT

This paper discusses the concept of sustainable procurement behavior (SPB) and the effects of personal values, leadership style and awareness on SPB. As the SPB became increasingly important in implementation for sustainable procurement practices, the paper aims to present the review of the existing literature on SPB and study the factors that can influence the SPB of procurers. The paper based on review of past literature, conceptualizes that personal values, awareness, leadership are significantly related to SPB and organizational culture moderates the relationship among personal values, leadership style, awareness and SPB. The results of this conceptual paper are likely to provide important insights to managers, policy-makers and researchers to further understand the factors which effect the SPB and improve the implementation of SPP practices.

JEL Classification: H50; H57; Q01; Q55.

Keywords: Sustainable Procurement Behavior; Personal Values; Leadership Style; Organizational Culture.

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1. INTRODUCTION

The concept of sustainability has emerged as a prime challenge since last two decades and driven by the social, economic and environmental issues (Sancha, 2016). Sustainability in relation to environment has gained tremendous popularity since the Rio de Janeiro Earth Summit in 1992, Paris Conference of United Nations Climate Change in 2015 and later signing of the famous Paris Agreement in New York in 2016. With the decline of overall global environmental quality, a proactive approach to environmental and resource issues to halt this decline is needed in order to help safeguarding the environment (Yaakub, Subhan, Abdullah and Gapar, 2015). Public procurement is an important aspect of international trade and it accounts for on average country 10 to 20 percent of their GDP (WTO-2016), therefore it can play a pivotal role in addressing the environmental issues. To encourage the procurement of environmentally sound services and goods, public procurement policies can be formulated to promote the trend of sustainable procurement. Geng and Doberstein (2008) also highlighted that considering the depleting earth resources and environmental apprehensions, there is urgent need to implement effectively sustainable public procurement practices in all countries more importantly in developing countries. Sustainable public procurement (SPP) is defined by Walker and Brammer (2012) as: "It is pursuit for objectives of sustainable development by the process of supply and purchasing, incorporating environment, economic and social aspects".

The level and type of sustainable public procurement differ greatly among regions (Brammer and Walker, 2011), likewise in South Asia, the level of sustainable implementation and nature differs among the countries. Sustainable procurement practices in public sector in many developed countries are already giving fruitful results (Testa et al., 2015), but the implementation of sustainable public procurement practices is low in South Asia. Nepal, Pakistan,

India, Bangladesh, Sri Lanka, Maldives and Bhutan are the members of a regional organization called South Asian Association of Regional Cooperation (SAARC). This organization is making various endeavors to improve public procurement practices and implement sustainable public procurement practices in South Asia, but the pace of implementation is low (PPRA, 2015). Sri Lanka and Bangladesh are making some progress, but the pace of implementation is poor in Pakistan (UNEP, 2013). In Pakistan, despite of having general legislations and policies by the government, the pace of implementation process is deplorable due to individual and organizational level issues in public departments (Akhtar & Sulheri, 2015). Although leaders in corporate world have increasingly acknowledged their role for contributing towards sustainability (Lozano, 2015), in public organizations procurers have developed risk averse behavior and has less exposure to be involved in projects with risks such as the procurement of sustainable products and services due to their previous policies/rules of public procurement (Rolfstam, 2012). Thus, public procurers are required to change their existing procurement behavior to fulfil the potential and reach a higher degree of sustainable procurement in their project. Therefore, it is relevant to investigate to what extent individual sustainable procurement behavior influences the implementation of sustainable public procurement in procurement projects and why certain procurers are showing more sustainable procurement behavior than others (Testa et al., 2015).

According to Environmental Vulnerability Index (EVI) of United Nations Environmental Program (UNEP), Pakistan falls in the category of extremely vulnerable country and ranks at 201 out of 234 countries. On the Climate Change Vulnerability Index (CCVI), Pakistan is at the level of 'extreme risk' with ranking at number 13 in 170 countries (UNEP, 2014). Therefore, it is imperative for the government of Pakistan to adapt sustainable practices; those can mitigate the environmental effects. In scenario of Pakistan, major challenges of implementation of green programs are needed to be borne by ministries and their autonomous bodies, which undertake various budgeting and managerial roles. In these ministries, accomplishment of sustainability initiative depends on procurers' willing engagement in sustainable behaviors. Even though there is involvement of political leader's and public authorities, there appears to be a wide gap among the ambition to act sustainably and on ground practices in Pakistan to improve environment (Javid & Sharif, 2016). Many practitioners and scholars have recognized the assessment and modification of behavior in achieving sustainable objectives (Akhtar & Sulheri, 2015; Javid & Sharif, 2016; Schneider, 2013). Sustainable behavior of procurers can be one factor pursuing to include sustainable criterion in the procurement process. Lember et al. (2015) said that public organizations procurers have developed risk averse behavior and less exposure to be involved in projects with risks such as procurement of sustainable products and services due to their previous policies/rules of public procurement.

Study by Mostafa et al. (2015), in public sector, discovered that public service is a motivational factor that influences the organizational commitment of public officials towards sustainability. It has been seen that there is negligence on part of Punjab (Pakistan) government departments in making contracts, despite the presence of policies, the procurers are not catering for green procurement. Lack of tendency to change to sustainable procurement behavior in the procurement management is one of the factor for not implementing the green practices. Besides this overall willingness to act for the environment and a sense of concern for the environmental issues are significantly low in Pakistan (Nazish, 2015). In implementation stage, human involvement is critical as the behavioral changes are required to change the old practices of procurement. Behavioral modifications are considered least expensive and quickest way to implement green practices (Schneider, 2013). Sustainable procurement behavior of public procurement officers is important to study because of various reasons, Firstly, due to their immense power/involvement in decision making and implementation of sustainable practices in semi-government departments (autonomous and semi-autonomous); secondly, as public procurement officers undertake their duties in conformance with aim of guarding and protecting the nations resources. Third, primary motivation of public officers is "Patriotism". They regard it is their moral duty to do best for society and environment (Perry, 2010; and Hart, 1985).

The majority of the earlier studies on SPP are conducted in Europe, Australia and America and less attention is paid to Asian continent, particularly in Pakistan. Existing studies have paid more attention in the investigation of barriers, drivers and environmental management systems. Less studies have covered the influence of personal behavior and beliefs (Testa et al., 2015; Lember et al., 2015). Moreover, in prior literature on sustainable behaviour, the numbers of quantitative studies are very limited and offer inconclusive findings (Graves and Sarkis, 2010; Michael & Campbell, 2016; Ramus and Stegar, 2000; Schwarz & Freeland, 2012; Morali & Searcy, 2013). Even though there has been a rise in number of studies in the field of sustainability, studies have failed to explain how organizations can successfully implement the practices of sustainability and how to improve the sustainable behavior (Seuring & Muller, 2008; Grandia, 2012; Pagell & Shevchenko, 2014). Hence, sustainable behavior

merits further investigation in Pakistan because the findings of the previous studies may not be generalizable to the Pakistani context due to cultural and contextual differences.

Moreover, no study has been found examining or testing the relationship between variables (personal values, leadership style, and awareness) and sustainable behavior and moderating impact of organizational culture in the context of sustainable public procurement. This research study has made an endeavor to fill this gap and analyze the influences on the sustainable procurement behavior of the procurers in government departments of Punjab (Pakistan) with a view to investigate the effects of three variables, namely personal values, leadership style and awareness on sustainable behavior. The study also has examined the moderating role of organizational culture on these relationships. Therefore, keeping in view the aforementioned, it is imperative to address the issue, by investigating the factors influencing the sustainable public procurement behavior of the procurement management in government departments of Punjab (Pakistan) which can eventually improve the implementation process of sustainable procurement practices in Pakistan.

2. LITERATURE REVIEW AND CONCEPTUAL CLARIFICATION

In existing literature, sustainable development denotes to the balance among social, environmental and economic sustainability (Schultz and Zelezny, 1999; Dietz et al., 2005; Elkington, 2004), however, in most of empirical and theoretical investigations, main focus of sustainability has been on either on single or two areas. Studies concentrating on one area frequently have studied the environmental aspects (Elkington, 2004; Udo and Pawłowski, 2011). Studies on both economic and environmental aspects of sustainability have been conducted in business and public sectors (Golusin et al., 201; Munda, 1997). Moreover, some studies carried out on economic and social sides of sustainability (Dempsey et al., 2011; Tuziak, 2010). Apart from this, there are studies which focused on completely three areas of sustainability (Udo and Pawłowski, 2011; Ralston and Brock, 2011). Literature reviewed showed that in a large number of sustainability studies, the study topic was sustainability, yet the ultimate focus was on the environment, society or economy (Alhaddi, 2015; Blengini & Shields, 2010). Likewise, in this study, in order to be more focused, only one dimension of sustainability that is environmental would be studied and other two dimensions (economic and social) are not part of the study. Green public procurement behavior, pro-environmental public procurement behavior and sustainable procurement behavior have been often used interchangeably in literature (Carter & Easton, 2011; Ralston and Brock, 2011). Therefore, throughout this study, they are referred to as Green or sustainable procurement or pro-environmental procurement (Giovanni, 2012; Winter & Knemeyer, 2013).

Public Procurement: The terms procurement, purchasing, and sourcing are often used interchangeably in the literature although the concepts might have significant differences depending on the user (Johnsen et al., 2014), and therefore are necessary to be defined. According to the CIPS (2015), procurement is a comprehensive chain of actions from "identification of a requirement to the disposal of that requirement".

Importance of Public Procurement: Evans et al. (2010), indicated that public sector procures services and goods with public money; in developed countries such purchase represents 13 to 20 % of their gross domestic product (GDP). Perera (2012) indicated that the range is comparatively higher in developing countries which are 30 to 40 % of their GDP. Henceforth, if the public bodies exercise this immense market power by legislation and procurement policy then it can stimulate private sector to implement the sustainable practices in products, service and production technologies.

Issues in Public Procurement in many developing countries and developed countries: Corruption in public procurement is a common phenomenon, however, the level of corruption in developing countries is much higher.

Raymond (2008) stated that apart from procurement officials and decision makers, ministers and political parties are also the recipients of clandestine payments. Most of the government procurement contracts are not based on criteria of life cycle rather tenders are mostly of awarded on the basis of the criterion of MEAT (Most Economically Advantageous Tender). Therefore, contracting authorities caters for technical, price and qualitative aspects of goods and services in awarding public procurement contracts (Raymond, 2008), and no weightage is given to sustainable aspects. The procedure of MEAT can cause negative affect on advancement towards sustainable public procurement practices as the short term cost of sustainable product or services may be higher as compare to non-green products and services. Principles of Procurement Raymond (2008) has suggested few principles of procurement. These principles are ethics, competition, accountability, value of money and transparency. Walker

and Robinson (2008) highlighted that procurement system is also affected by culture, leadership and management etc.

Sustainability: Social concerns are studied by the scholars from many decades (Dodd, 1932; Bowen, 1953). The literature tends to agree that sustainability usually includes the core concepts of economic prosperity; social responsibility; and environmental responsibility or stewardship (Patari et al., 2011). Various authors have identified sustainability as a concept that has three pillars (economic, social, and environmental), with a special interest for public organizations (Opp & Saunders, 2013; Stazyk & Frederickson, 2014).

Research suggests that there is an inconsistent usage of sustainability, where several studies used term “sustainability” but were in fact referring to one or two of the three known areas (social, environmental and economic). In this paper only one aspect of sustainability that is environment is studied as numerous other scholars have also explored only one area of suitability (Hidayati, 2011; Mishra & Akman, 2014).

Definition of Sustainability:

According to Tate et al. (2010), sustainability denotes the consideration for ecologic, social and economic impact of activity, and it is also called as a triple bottom line. The most frequently cited definition of sustainable development (World Commission on Environment and Development, 1987, p. 8) involves meeting “the needs of the present without compromising the ability of future generations to meet their own needs.”

Sustainable Procurement:

Sustainable procurement means buying of such products and service due to which minimum harm is caused to the environment. It incorporates human health and environmental concerns into the search for high quality products and services at competitive prices (Kibert, 2016). Walker and Brammer (2012) defined sustainable procurement in these words; “the pursuit of sustainable development objectives through the purchasing and supply process, incorporating social, environmental and economic aspects”. Sustainable public procurement (SPP) is a process wherein environment related criteria are taken into account in procurement of goods, services, and work (European Commission, 2010).

Sustainable Procurement Behavior:

It is considered that sustainable behavior is the set of actions aimed at protecting the socio-physical resources of this planet (Verdugo et al., 2010). In the practical terms sustainable behavior is synonymous with the term pro-environmental behaviour, but for most researchers sustainable behavior is more effective and deliberate. Sustainable behaviors, noted by Williams and Dair (2007), are those behaviors carried out by individuals or groups which contribute to the three sustainability objectives. Sustainable behavior (also referred to as pro-environmental behavior or “green” behavior) can be defined as “behavior that harms the environment as little as possible, or even benefits the environment” (Steg and Vlek, 2009). Schneider (2011) stated that modification in behavior are possibly the fastest mode to present and individual sustainable revolution in organizations. Modifications in behavior are thought to be less expensive, clean and its paybacks are quick. Rolfstam (2012) proposed that sustainable procurement behavior may not be considered as routine behavior, procurers are needed to adapt sustainable procurement behavior and have to change previous regular procurement behavior. Sustainable behavior of procurers can be one factor pursuing to include sustainable criterion in the procurement process and their behavior can influence the actual level of implementation of SPP in procurement projects (Gunther & Scheibe, 2006). Overall willingness to act for the environmental sustainability and a sense of concern for the environmental issues are significantly low in Pakistan (Nazish, 2015).

Personal Values:

It is considered that values are determinants and guides of ideologies, behavior and social attitudes (Schwartz and Bilsky, 1987). Main reason to concentrate on aspect of values is the persuasive and important influence of values on manager’s decision making, interpersonal, environmental, and ethical and performance behaviors (Hemingway, 2005; Rokeach, 1973; Tuziak, 2010). Schwartz and Bilsky (1990) defined values as desirable goals, varying in importance, that serve as guiding principles in people’s lives. Values are regarded as a steady standard used by individuals to assess their own and others’ behaviors in various situations. Theory presented by Schwartz (1992) has ten types of values including, benevolence, tradition, power, hedonism, self-direction, universalism,

conformity, security, stimulation, achievement and power. According to Lord and Brown (2001), values can serve two functions; firstly, it can offer sense of purpose to personal behavior and consistency. Secondly, values are the basic foundations of behaviors which meet the requirement of social units and groups as the values are considered normative standards. The behavior and actions can be influenced by the leaders through the values exhibited during the general functions and also by the strategies which are coherent with the organizational and personal values. In literature, there are number of environmental sustainability surveys identifying the important factors; those can influence sustainable behaviors (Dietz et al., 2005; Kemmelmeier et al., 2002; Schultz and Zelezny, 1999; Stern, 2000). Many studies recognized that personal values are central basis for outlining relationship with the environmental sustainability (Axelrod and Lehman, 1993; Hards, 2011; Lord and Brown, 2001).

Awareness:

Vermeeren (2014) viewed that when persons have perceived behavioral control and intention, they show more desired behavior and their performance is improved when they have awareness, motivation, knowledge and skills. Awareness of sustainability has a critical value for an organization and it can be measured by its utilization and realization of facts and knowledge (Garbie, 2014; Chou and Chou, 2012). Hines et al. (1987) identified that in predicting sustainable behaviour, the environmental awareness is one of the most important antecedent. Similar views were offered by Mostafa et al. (2015), and expressed that environmental awareness is a good predictor of sustainable attitude and behavior. Another empirical study showed that hotel management is more eager to adopt sustainable practices when they have awareness and knowledge, and they also display more sustainable behavior (Chan et al., 2014). The individual's awareness to safeguard the environment influences their behavior to practice sustainability in their organizations (Ahmad et al., 2012).

Leadership Style:

Ngambi et al. (2011) highlighted that leadership is a process in which others commitment is influenced towards attainment of shared vision, value is added with integrity and passion, the influence is such that volunteer cooperation is received from members. Michael (2010) indicated that in an organization, leadership style has a relationship of cause and effect on success of organization. Culture, value, employee motivation and change tolerance are determined by leaders in an organization. Five leadership styles are famous in modern leadership theories which include: Visionary leadership, transactional leadership, culture based leadership, transformational leadership and charismatic leadership. The relationship among leaders and members is significantly influenced by the style of leadership (Jeremy et al., 2012). Leadership and commitment within organizations are the key to sustainable procurement (Brammer and Walker, 2011). There are many studies which identified that transformational leaders are equally effective in both private and public sector (Dumdum, Lowe & Avolio, 2002; Giauque, Anderfuhren-Biget & Varone, 2013). In conceptualizing sustainable leadership, the theory of transformational leadership provides an interesting framework (Egri & Herman, 2000). Greening in an organization requires to have change in behavior of employees and it can have carried out by value based and inspirational transformational leadership, and transformational leader can motivate his/her employees to agree to change (Fernandez, Junquera & Ordiz 2006). Michaelis and Sonntag (2010) argued that commitment to change can be positively influenced by the transformational leadership.

Organizational Culture:

Culture refers to the norms, values and assumptions that are shared among the organizational members and that tend to persist in time (Kotter & Heskett, 1992). Culture can be assumed, invented, discovered or developed by the management team in an effort for disseminating a desired set of values that will guide the organizations and employees' behavior (Schneider, 1988). Harris & Crane (2002) defined the green organizational culture as it is the extent to which, symbols, values, assumptions and artifacts organization reflect, need or desire to operate in manner which is environmentally sustainable. Green organizational culture is a symbolic context regarding managing organization, catering for environmental protection where behaviors and processes are guided by environmental protection sense making (Chen, 2011). Formal and informal norms and values that govern the firm's routines facilitate the implementation of tangible sustainable practices because all the departments and employees acknowledge and share the same sustainability values (Karna et al., 2003). Green organizational culture can be seen as a strategic asset that allows organizations to translate their sustainable proactive strategies into a better performance. Having a strong green organizational culture allows organizations to capture the benefits associated with these practices because all the organizational and functional levels share the same green values and norms.

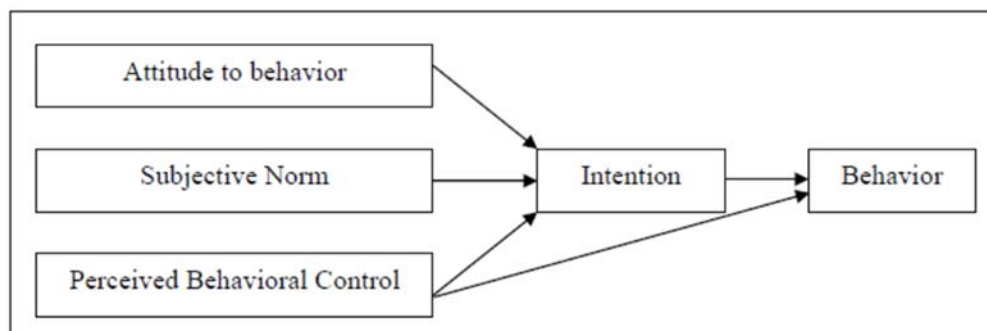
Green organizational culture can act as a complementary resource that can strengthen and influence the implementation of sustainable practices in an organization (Teece, 1986).

In Literature scholars (Dunphy et al., 2007; Orssatto, 2001; Kekale and Kekale, 1995) illustrated that failure for the implementation of sustainability is caused by a mismatch of organizational culture. It is considered that a successful implementation of sustainability practices depends on the organizational culture. Organizations that adopt the proactive environmental management strategies could integrate the objectives of sustainability within different departments of organization to solve the sustainability problems by utilizing the innovative practices (Greeno, 1992), such as green public procurement. Organizational culture plays an important role in the implementation of sustainable practices. In support of this view, Brio, Fernandes and Junquera (2007) stated that organizational culture is vital indicator and determinant in failure or success of implementation of green practices. On the other hand, Stead and Stead (1992) viewed that green culture in literature mostly addressed superficially and common view in the literature is to address the environmental issues; organization necessarily needs to have dramatic cultural changes.

3. THEORETICAL AND CONCEPTUAL FRAMEWORK

This study is guided by the two theories; theory of planned behavior (TPB) is utilized as underpinning theory while value-belief norm (VBN) theory is used as supporting theory to enhance the understanding of phenomenon of the study. VBN theory basing on these earlier theories adopts a hierarchical model, in which behavior and attitudes are directly influenced by individual values and beliefs. In the VBN model, value orientations are classified as social or altruistic, egocentric and biospheric. People's general beliefs are formed about the environment due to such influences of value orientations. An individual with more awareness regarding cost of their behavior will be having more inclination towards sustainable behavior. The model of VBN in studies has been applied in various context of environmental sustainability, such as Ford et al. (2009) studied social acceptance measurements and cognitive components; sustainable behavior predication models reliability and validity was checked for its variables by various scholars such as Hansla et al., (2008), Nordlund and Garvill, (2003) and Corraliza and Berenguer, (2000). This theory offers a framework to link factors of casual chain which can result in sustainable actions; the factors are beliefs, norms and values.

Theory of Planned Behavior (TPB): In research, TPB (Ajzen, 1991) has been widely used on varied range of behaviors of humans (Botetzagias, Dima & Malesios, 2014).



Source: Ajzen, (1991).

Figure 1.
Theory of Planned Behaviour

This theory postulates three determinants including intention which is attitude, subjective norm and perceived behavioral control. According to this theory, a person's behaviour is actually influenced by the intentions and the intentions are firstly influenced by the person's attitude. It has been viewed that the TPB can explain sustainable behavior (Cordano & Frieze, 2000), and the TPB continues to attract the attention of many researchers of sustainability (Greaves, Zibarras & Stride, 2013; Lulfs & Hahn, 2013; Blok et al., 2014). Mostafa (2006) has utilized the theory of planned behaviour in his empirical study to assess the Egyptian green behaviour by attitude-intention-purchase model. In an another empirical study, Chan and Lau (2001) measured the green procurement behaviour of American and Chinese individuals and the TPB has been used in many other studies(Barber et al.,

2014; Steg et al., 2014). Basing on the above discussion, in review of literature, a research model is formalized for this study which is depicted in Figure 3.1. Personal values, leadership style, awareness are the independent variables. Organizational culture is introduced as the moderator in this study.

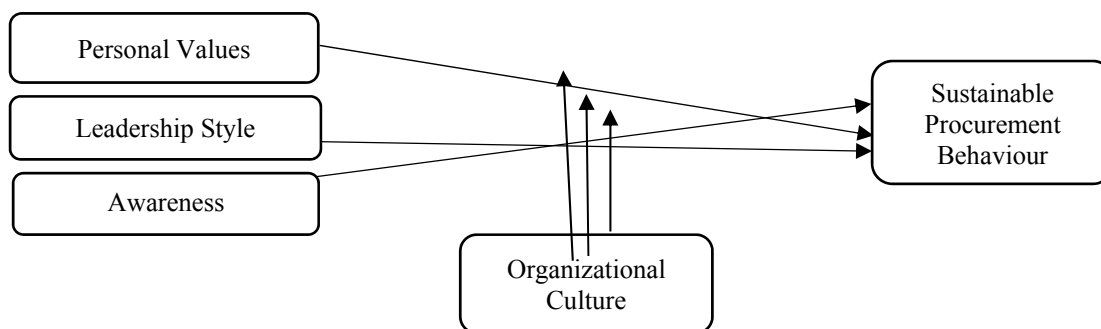


Figure 2.
Conceptual Framework

On the basis of above-mentioned literature review, a new conceptual model has been proposed, which proposes the following research Propositions (P):

P1: Personal values are significantly related to SPB.

P2: Leadership style is significantly related to SPB.

P3: Awareness is significantly related to SPB.

P4: Organizational culture moderates' relationship among personal values, leadership style, awareness and SPB.

5. DISCUSSION AND IMPLICATIONS

This study has taken a broad view of sustainable procurement and focused on the major issue of sustainable procurement behaviour. A conceptualization based on a literature review is offered by this paper. The paper suggests that sustainable procurement behaviour of managers contributes to improvement of the sustainability efforts, SPB has significant role in implementation sustainable public procurement. The proposed study reported in this conceptual paper provides a starting point for understanding SPB, the paper extensively reviewed the literature in the field of sustainable behavior and a conceptualization based on this review is offered, which suggests that procurement manager's SPB is expected to be influenced by the factors such as personal values, leadership and awareness. This is inconsistent with TPB and VBN theory and also in line with the prior studies of various researchers (Chou, 2012; Hines et al. 1987; Kuipers et al., 2014; Steg & Vlek, 2009; Weingaertner, 2014). Moreover, organizational culture has a moderating role in relationship of personal values, leadership style, awareness and SPB as highlighted in previous studies (Harris & Crane 2002; Van der Voet, 2013).

Ideally, organizations and governments are required to purchase sustainable service and products, however, organizations are prevented to such purchases due to the lack of awareness, non-effectiveness of leaders, lack of motivation and lack of sustainable behavior (Chou and Chou, 2012; Hines et al., 1987; Weiss, Anita, Mughal & Zeb, 2012). SPB is considered as an important factor in successful implementation of SPP (Weingaertner and Moberg, 2014). In order to reduce the degree of deterioration of environmental sustainability, it is necessary to understand and change the relevant human behavior (Steg & Vlek, 2009), such as procurers in government departments of Pakistan. Studies have also shown the direct relationships of awareness, values, attitude and practices of the individuals towards SPB (Oskamp and Schultz, 1996). Leadership contributes to individual's willingness to change and the implementation of all organizational changes (Kuipers et al., 2014), such as behavioral change. Organizational culture has a pivotal role in the implementation of sustainable practices as pointed out by Van der Voet (2013). Harris & Crane (2002) highlighted that Organizational culture plays an important role in the adaption of sustainable practices as SPB. Procurers in government departments have to be willing to change their past practices and thus their behavior needs to be changed to implement sustainable procurement practices as suggested by Palmujoki et al. (2010).

It was found that there is lack of tendency to change in procurement management, because in Pakistan, general sense of concern for environmental sustainability is significantly low as pointed out by Nazish (2015). The paper

proposes that enhancement of awareness can improve SPB. Moreover, transformational leadership style and personal values can positively affect SPB, which can improve sustainable procurement practices, thus leads to sustainable development. It also proposes that organisational culture can moderate the relationship among personal values, leadership style, awareness and SPB. Although, measures have been taken to ensure the quality of paper, however in research work at conceptual level, experience, mind-set and knowledge of researcher can have impact on the result of the study.

This paper is likely to add to the extant body of sustainable behavior literature that focuses on the public organizations. The study can also benefit scholars, researchers, practitioners, political leaders, and organizational management and government procurement officials. This conceptual framework and propositions require validation through statistical tools and by primary data. Such validation is necessary in order to obtain precise understanding of SPB. Future work might improve this research work by taking a closer look at each variable of this study.

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